PATENT COOPERATION TREATY



# PCT

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

| Applicant's or agent's file reference<br>BCS 02-1002 | **FOR FURTHER ACTION** | See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416) |
|---|---|---|
| International application No.<br>PCT/EP 03/02009 | International filing date *(day/month/year)*<br>27.02.2003 | Priority date *(day/month/year)*<br>05.03.2002 |
| International Patent Classification (IPC) or both national classification and IPC<br>C07D231/44 | | |
| Applicant<br>BAYER CROPSCIENCE S.A. et al | | |

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 7 sheets, including this cover sheet.

   ☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

   These annexes consist of a total of sheets.

3. This report contains indications relating to the following items:

   - I ☒ Basis of the opinion
   - II ☐ Priority
   - III ☒ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
   - IV ☒ Lack of unity of invention
   - V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
   - VI ☐ Certain documents cited
   - VII ☐ Certain defects in the international application
   - VIII ☐ Certain observations on the international application

| Date of submission of the demand | Date of completion of this report |
|---|---|
| 08.09.2003 | 12.07.2004 |
| Name and mailing address of the international preliminary examining authority:<br>European Patent Office - P.B. 5818 Patentlaan 2<br>NL-2280 HV Rijswijk - Pays Bas<br>Tel. +31 70 340 - 2040 Tx: 31 651 epo nl<br>Fax: +31 70 340 - 3016 | Authorized Officer<br>Fort, M<br>Telephone No. +31 70 340-4123 |

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/EP 03/02009

## I. Basis of the report

1. With regard to the **elements** of the international application *(Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17))*:

**Description, Pages**

1-60 as originally filed

**Claims, Numbers**

1-10 as originally filed

2. With regard to the **language,** all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

   These elements were available or furnished to this Authority in the following language: , which is:

   ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).

   ☐ the language of publication of the international application (under Rule 48.3(b)).

   ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

   ☐ contained in the international application in written form.

   ☐ filed together with the international application in computer readable form.

   ☐ furnished subsequently to this Authority in written form.

   ☐ furnished subsequently to this Authority in computer readable form.

   ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

   ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

   ☐ the description, pages:

   ☐ the claims, Nos.:

   ☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

   *(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)*

6. Additional observations, if necessary:

**III. Non-establishment of opinion with regard to novelty, inventive step and industrial applicability**

1. The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non-obvious), or to be industrially applicable have not been examined in respect of:

   ☐ the entire international application,

   ☒ claims Nos. 10

   because:

   ☐ the said international application, or the said claims Nos. relate to the following subject matter which does not require an international preliminary examination (specify):

   ☐ the description, claims or drawings *(indicate particular elements below)* or said claims Nos. are so unclear that no meaningful opinion could be formed *(specify)*:

   ☐ the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed.

   ☒ no international search report has been established for the said claims Nos. 10

2. A meaningful international preliminary examination cannot be carried out due to the failure of the nucleotide and/ or amino acid sequence listing to comply with the standard provided for in Annex C of the Administrative Instructions:

   ☐ the written form has not been furnished or does not comply with the Standard.

   ☐ the computer readable form has not been furnished or does not comply with the Standard.

**IV. Lack of unity of invention**

1. In response to the invitation to restrict or pay additional fees, the applicant has:

   ☐ restricted the claims.

   ☒ paid additional fees.

   ☐ paid additional fees under protest.

   ☐ neither restricted nor paid additional fees.

2. ☐ This Authority found that the requirement of unity of invention is not complied with and chose, according to Rule 68.1, not to invite the applicant to restrict or pay additional fees.

3. This Authority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is

   ☐ complied with.

   ☒ not complied with for the following reasons:

   **see separate sheet**

4. Consequently, the following parts of the international application were the subject of international preliminary examination in establishing this report:

☐ all parts.

☒ the parts relating to claims Nos. 1-9 .

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

| | | | |
|---|---|---|---|
| Novelty (N) | Yes: | Claims | |
| | No: | Claims | 1-9 |
| Inventive step (IS) | Yes: | Claims | |
| | No: | Claims | 1-9 |
| Industrial applicability (IA) | Yes: | Claims | 1-9 |
| | No: | Claims | |

2. Citations and explanations

**see separate sheet**

**Re Item IV**

**Lack of unity of invention**

This International Examining Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims: 1-3, 7-9

A method of controlling parasites in or on an animal comprising administering to the animal a parasiticidal amount of a 5-substituted-alkylaminopyrazole derivative of formula (I) as defined in claim 1, the use of compounds of formula (I) for the control of parasites in or on animals or for preparing a veterinary medicament and a pesticidal composition containing a compound of formula (I)

2. Claims: 4-6

5-substituted-alkylaminopyrazole derivatives of formula (I) with the substituents R1, W, R2, R3, R4, A, R5, R6 as defined in claims 4-6

3. Claim : 10 (partially)

A process for the preparation of a compound of formula (I) as defined in claim 1 to 6 according to a)

4. Claim : 10 (partially)

A process for the preparation of a compound of formula (I) as defined in claim 1 to 6 according to b)

5. Claim : 10 (partially)

A process for the preparation of a compound of formula (I) as defined in claim 1 to 6 according to c)

6. Claim : 10 (partially)

A process for the preparation of a compound of formula (I) as defined in claim 1 to 6 according to d)

7. Claim : 10 (partially)

A process for the preparation of a compound of formula (I) as defined in claim 1 to 6 according to e)

8. Claim : 10 (partially)
A process for the preparation of a compound of formula (I) as defined in claim 1 to 6 according to f)

The common technical feature linking the 8 inventions listed in the invitation to pay additional fees is that they all deal with 5-substituted-alkylaminopyrazole derivatives. This feature linking together the 8 inventions is known in view of D1 (D1 = EP 0295 117) which describes compounds of formula (I) as described in present claim 1 (see compound 99). Therefore this feature cannot represent the unifying special technical feature in the sense of Rule 13(2) PCT. Note that the subject-matter of claims 1-3 and 7-9 (subject 1) lacks unity with the subject-matter of claims 4-6 (subject 2) since the use of 5-substituted-alkylaminopyrazoles such as compound 99 for controlling animal parasites has already been described in D1.
No further "same or corresponding" features common to the 8 inventions can be distinguished which could possibly fulfil this requirement. Therefore, it is concluded that the application lacks the required unity of invention prescribed by Article 34 PCT.

Only one of 7 required additional search fees was timely paid by the applicant who requested an additional search for the subject-matter of claims 4-6 ( invention n°2). Therefore, the inventions 3-8 identified above in respect of which no international search report has been established will not be the subject of international preliminary examination (Rule 66.1(e) PCT). As an additional examination fee has been paid, claims 1-9 relating to the inventions n° 1 and 2 were the subject of international preliminary examination in establishing this examination report.

**Re Item V**
**Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

Subject 1 (claims 1-3 and 7-9):
D1 describes the use of N-Phenylpyrazoles of formula (I) such as compound 99 in veterinary medicine and livestock husbandry for controlling arthropods, helminths or protozoa which are parasitic internally or externally upon vertebrates, particularly warm-blood vertebrates and which are injurious to, or spread or act as vectors of diseases in man and domestic animals (see D1, p.6, l.17-23). D1 is novelty destroying for the subject-matter of claims 1-3 and 7-9 (Article 33(2) PCT).

Consequently claims 1-3 and 7-9 do not fulfill the requirements of Article 33 (3) PCT.

The subject-matter of claims 1-3 and 7-9 is considered to be industrially applicable and the present invention is therefore considered to satisfy the criterion set forth in Article 33(4) PCT.

Subject 2 (claims 4-6):
D1 discloses N-Phenylpyrazoles of formula (I) such as 3-Cyano-1-(2,6-dichloro -4-trifluoromethylphenyl)-5-ethoxymethyleneamino-4-trifluoromethanesulphonylpyrazole (compound 99). D1 is novelty destroying for the subject-matter of claims 4-6 (Article 33(2) PCT).
Consequently claims 4-6 do not fulfill the requirements of Article 33 (3) PCT.

The subject-matter of claims 4-6 is considered to be industrially applicable and the present invention is therefore considered to satisfy the criterion set forth in Article 33(4) PCT.